



Mitigation Measures Keep Hospital Afloat During Storm

Full Mitigation Best Practice Story

Jefferson County, Texas

Beaumont, TX — In September 2005, Hurricane Rita hit the Texas-Louisiana coast as a Category 3 storm, leaving behind catastrophic damage. Damage to Memorial Hermann Baptist Hospital-Beaumont alone reached an astounding \$58 million.



“We had water infiltration on the first floor of our buildings and in the towers,” said Jay DeVille, Memorial Hermann Baptist Beaumont Hospital director of facility management. “With wind gusts at 95 miles per hour (mph), the roofs of our fifth floor and Day Surgery Unit were also heavily damaged.”

To minimize the effects of future storms, Memorial Hermann Baptist has successfully initiated mitigation measures.

The hospital received a \$2.6 million grant from the Federal Emergency Management Agency (FEMA) through the Hazard Mitigation Grant Program (HMGP) to invest in mitigation measures. HMGP assists states and local communities in implementing long-term mitigation measures following a major disaster declaration. It provides up to 75 percent of a project’s total cost and can be used to fund projects to protect either public or private property.

DeVille said the hospital was able to undertake several mitigation projects thanks to funding from FEMA. “We installed hurricane shutters on entry doors and on all windows on the first and second floors of our buildings. We added a water well and two quick-connect systems, one for each of our buildings,” he said.

DeVille said the hospital also water-proofed all the exterior walls, added through-wall flashing, and replaced roofs with the roofing material recommended by the facility’s insurance company.

All that work paid off. By the time Hurricane Ike drilled in with 100-mph winds on September 13, 2008, the 400,000-square-foot facility was prepared to weather it. In fact, the hospital remained virtually unscathed.

“We escaped the storm with minimal damage to our facility,” said DeVille. “We got a little water resulting from wind-driven rain in a few areas. The water-proof sealant was not as effective as we thought it would be. However, our hurricane shutters protected our entrances and our windows.”

DeVille said Hurricane Rita was a major business interruption for the hospital, forcing it to utilize temporary power for 12 days. “With Hurricane Ike, we were better prepared. We had two large generators and all of our electrical equipment functioned at capacity,” he said.

The mitigation measures taken by the hospital and supported by the State of Texas and FEMA helped Memorial Hermann Baptist Hospital avoid losses that could have occurred again with Hurricane Ike and future storms.

The hospital chose to rebuild after Hurricane Rita — stronger, safer, and smarter.

Activity/Project Location

Geographical Area: **Single County in a State**

FEMA Region: **Region VI**

State: **Texas**

County: **Jefferson County**

City/Community: **Beaumont**

Key Activity/Project Information

Sector: **Public**
Hazard Type: **Severe Storm; Flooding; Hurricane/Tropical Storm**
Activity/Project Type: **Flood-proofing; Retrofitting, Non-structural; Elevation, Utilities**
Structure Type: **Masonry, Reinforced**
Activity/Project Start Date: **01/2007**
Activity/Project End Date: **Ongoing**
Funding Source: **Hazard Mitigation Grant Program (HMGP)**
Funding Recipient: **Critical Facility - Medical**
Application/Project Number: **0053**

Activity/Project Economic Analysis

Cost: **\$3,465,000.00 (Actual)**
Non FEMA Cost: **866250**

Activity/Project Disaster Information

Mitigation Resulted From Federal
Disaster? **Yes**
Federal Disaster #: **1606 , 09/24/2005**
Federal Disaster Year: **2005**
Value Tested By Disaster? **Yes**
Tested By Federal Disaster #: **1791 , 09/13/2008**
Repetitive Loss Property? **No**

Reference URLs

No URLs were submitted

Main Points

No Main Points were entered.



Photo of entrance to Memorial Hermann Baptist Beaumont Hospital